

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of transmitting data packets, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns,

wherein said sync patterns are limited to two different sync patterns within three immediately consecutive sync patterns in said data stream.

2. (Cancelled).

3. (Original) The method as defined in Claim 1, wherein the fixed pattern comprises three words.

4. (Original) The method as defined in Claim 3, wherein the three words includes 'eb', 'cb' and 'aa', expressed in a hexadecimal notation.

5. (Original) The method as defined in Claim 1, wherein the variable pattern comprises five words.

6. (Original) The method as defined in Claim 5, wherein the five words includes '4c', 'ea', 'cd', '7a' and '81', expressed in a hexadecimal notation.

7. (Currently Amended) A method of transmitting data packets, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns;

wherein the variable patterns are '4ceacd7a81' and 'cd7aea814c' expressed in a hexadecimal notation.

8.-11. (Cancelled).

12. (Original) A method of receiving a packet data transmitted by the method defined in Claim 1, said method including a step of detecting a sync.

13. (Original) A method of receiving a packet data transmitted by the method defined in Claim 1, said method including the steps of:

(a) detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) securing a sync for examining only the fixed pattern,

wherein said step (a) processes the data until the sync is secured, and said step (b) processes the data after the sync is secured.

14. (Currently Amended) A packet data transmitting apparatus for transmitting data packets, said transmitting apparatus comprising:

(a) means for generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) means for generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) means for generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns; and

(d) means for adding one of said sync patterns to each of said packets in a data stream, wherein said sync patterns are limited to two different sync patterns within three immediately consecutive sync patterns in said data stream.

15. (Previously Presented) A packet data receiving apparatus for receiving the packet data transmitted by the method defined in Claim 1, said receiving apparatus comprising:

(a) means for detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) means for securing a sync for examining only the fixed pattern,

wherein said means defined in (a) processes the data until the sync is secured, and said means defined in (b) processes the data after the sync is secured.

16. (Currently Amended) ~~A method as defined in Claim 1A method of transmitting data packets, wherein the data packets comprise packet data comprises a plurality of blocks, and the blocks include 's' words having a block header of 'm' words, said method further comprising the step of: said method comprising the steps of:~~

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ('q' = m + n), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns; and

(e) adding a transmission header of 's × k' words (k is a natural number),

wherein the transmission header is divided into 'k' pieces of blocks at intervals of every 's' words, each block of said 'k' pieces of blocks includes the fixed pattern of 'm' words at a top thereof, the fixed pattern employs a pattern other than patterns used in the block header; and wherein said sync patterns are limited to two different sync patterns within three immediately consecutive sync patterns in said data stream.

17. (Currently Amended) A method of transmitting data packets, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns

wherein the variable patterns are '4cead7a81' and 'cd7aea814c' expressed in a hexadecimal notation.

18. (Previously Presented) A method as defined in Claim 17, wherein the fixed pattern comprises three words.

19. (Previously Presented) A method as defined in Claim 18, wherein the three words includes 'eb', 'cb' and 'aa', expressed in a hexadecimal notation.

20. (Previously Presented) a method of receiving a packet data transmitted by the method defined in Claim 17, said method including a step of detecting a sync.

21. (Previously Presented) A method of receiving a packet data transmitted by the method defined in Claim 17, said method including the steps of:

(a) detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) securing a sync for examining only the fixed pattern,

wherein said step (a) processes the data until the sync is secured, and said step (b) processes the data after the sync is secured.

22. (Currently Amended) A packet data transmitting apparatus for transmitting data packets, said transmitting apparatus comprising:

(a) means for generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) means for generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) means for generating sync patterns comprising 'q' words ('q' = m + n), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns; and

(d) means for adding one of said sync patterns to each of said packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns,

wherein the variable patterns are '4ceacd7a81' and 'cd7aea814c' expressed in a hexadecimal notation.

23. (Previously Presented) A packet data receiving apparatus for receiving the packet data transmitted by the method defined in Claim 17, said receiving apparatus comprising:

(a) means for detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) means for securing a sync for examining only the fixed pattern,

wherein said means defined in (a) processes the data until the sync is secured, and said means defined in (b) processes the data after the sync is secured.

24. (Previously Presented) A method as defined in Claim 17, wherein the packet data comprises a plurality of blocks, and the blocks includes 's' words having a block header of 'm' words, said method further comprising the step of:

adding a transmission header of 's X k' words (k is a natural number),

wherein the transmission header is divided into 'k' pieces of blocks at intervals of every 's' words, each block includes the fixed pattern of 'm' words at a top thereof, the fixed pattern employs a pattern other than patterns used in the block header.

25. (Currently Amended) A method of transmitting data packets, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns,

wherein said sync patterns are limited to two different sync patterns within three immediately consecutive sync patterns in said data stream.

26. (Previously Presented) The method as defined in Claim 25, wherein the variable pattern comprises a plurality of words, and the variable patterns are made by changing an order of the words.

27. (Previously Presented) The method as defined in Claim 25, wherein the fixed pattern comprises three words.

28. (Previously Presented) The method as defined in Claim 27, wherein the three words includes 'eb', 'cb' and 'aa', expressed in a hexadecimal notation.

29. (Previously Presented) The method as defined in Claim 25, wherein the variable pattern comprises five words.

30. (Previously Presented) The method as defined in Claim 29, wherein the five words includes '4c', 'ea', 'cd', '7a' and '81', expressed in a hexadecimal notation.

31. (Currently Amended) A method of transmitting data packets, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns and,

wherein the variable patterns are '4ceacd7a81' and 'cd7aea814c' expressed in a hexadecimal notation.

32. (Previously Presented) A method of receiving a packet data transmitted by the method defined in Claim 25, said method including a step of detecting a sync.

33. (Previously Presented) A method of receiving a packet data transmitted by the method defined in Claim 25, said method including the steps of:

(a) detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) securing a sync for examining only the fixed pattern,

wherein said step (a) processes the data until the sync is secured, and said step (b) processes the data after the sync is secured.

34. (Currently Amended) A packet data transmitting apparatus for transmitting data packets, said transmitting apparatus comprising:

(a) means for generating a fixed pattern comprising 'm' multibit words (m is an integer greater than 0);

(b) means for generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) means for generating sync patterns comprising 'q' words ('q' = m + n), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns; and

(d) means for adding one of said sync patterns to each of said packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns,

wherein said sync patterns are limited to two different sync patterns within three immediately consecutive sync patterns in said data stream.

35. (Previously Presented) A packet data receiving apparatus for receiving the packet data transmitted by the method defined in Claim 25, said receiving apparatus comprising:

(a) means for detecting a sync for examining both of a fixed pattern and a variable pattern of a data received; and

(b) means for securing a sync for examining only the fixed pattern,

wherein said means defined in (a) processes the data until the sync is secured, and said means defined in (b) processes the data after the sync is secured.

36. (Currently Amended) A method of transmitting data packets, said method comprising the steps of:

(a) generating a fixed pattern comprising 'm' multibit words ('m' is an integer greater than 0);

(b) generating variable, non-random patterns of predetermined bit structure, each pattern comprising 'n' words ('n' is an integer greater than 1);

(c) generating sync patterns comprising 'q' words ($q = m + n$), each of the sync patterns formed by combining the fixed pattern and one of the variable patterns;

(d) adding one of said sync patterns to each of said data packets in a data stream, wherein consecutive ones of said data packets each have added respectively different variable patterns,

wherein the packet data comprises a plurality of blocks, and the blocks includes 's' words having a block header of 'm' words, said method further comprising the step of

adding a transmission header of 's X k' words (k is a natural number),

wherein the transmission header is divided into 'k' pieces of blocks at intervals of every 's' words, each block includes the fixed pattern of 'm' words at a top thereof, the fixed pattern employs a pattern other than patterns used in the block header.